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An Inaugural Essay  
on Acute Hepatitis

For the degree of Doctor of Medicine  
in the

University of Pennsylvania

by

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Philadelphia, Jan. 25<sup>th</sup> 1828.



## Acute Hepatitis

This disease consists in an active inflammation of the liver, either involving its whole structure, or limited to its peritoneal covering; and hence must vary in severity according to its extent, duration, and the patient's constitution; consequently, the symptoms by which its presence is manifested will be different as the circumstances under which it exists.

From its early development, the importance of its functions, and the intimate sympathetic connexion which exist between it and the other principal viscera, as the brain, lungs, stomach &c., its derangement must necessarily

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Dear Sir,

I have the honor to acknowledge the receipt of your letter of the 10th inst. in relation to the purchase of the land for the purpose of building a new school house for the use of the children of the colored community in this city. I am very glad to hear that you are so interested in the welfare of the colored people, and I am sure that your efforts will be successful. I have already written to the Board of Education and they are now considering the matter. I will keep you posted as soon as I hear from them. Very respectfully,  
Your obedient servant,  
J. M. Smith

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exerts a wide and important influence upon nearly all the functions of the body. Thus, from hepatic derangement we have various and depressing affections of the mind, as the consequence of its connexion with the brain through the all pervading influence of the nervous system; and reciprocally, we have abscesses of the liver, as the consequence of injuries done to the brain; we have dyspeptic and other affections of the stomach from functional derangement of the liver, and inflammation of the latter organ as the effects of gastric or cutaneous irritations; pulmonary inflammation and abscesses from hepatic derangements, and hepatitis as the result of pneumonic or pleuritic inflammation, so that an inquiry into all the

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Consequences which might follow, or co-  
exist with the disease under consideration,  
would greatly exceed both the object and  
the necessary limits of this paper; there-  
fore I shall confine my remarks to a concise  
account of its symptoms, causes, and  
treatment, without pretending to go into  
an extended disquisition in its pathology,  
or even therapeutical management, when  
extensivity and variously complicated.

The better to arrive at this object,  
I shall speak only of the acute form of  
hepatitis, as in that state it is less usu-  
ally complicated with the other and  
remote affections, which are so frequent-  
ly the associates of it, more chronic  
character.

Acute hepatitis is very common-  
ly ushered in by strong marks of

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pyrexial excitement, as chills, or rigors,  
flushes, hot skin, thirst, frequent &  
corded pulse; at the same time there  
is, more or less fulness and tension of  
the hypochondriac region, attended with  
pain more or less acute, especially when  
pressed upon, and this pain is very  
frequently extended up to the top of  
the shoulder, where it is sometimes  
even more intolerable than in the re-  
gion of the liver itself.

From the immediate connexion  
of the liver with the stomach, there is  
not unfrequently vomiting of bilious  
matter, and its proximity to the di-  
aphragm and lungs gives rise very  
commonly to difficult respiration,  
with a short and dry cough.

It sometimes happens, particularly



in women, that all the phenomena of the disease take place in the left side, when this occurs, the left lobe is generally its seat.

In the commencement the heat of the surface is intense, attended by great thirst, the tongue being white, or coated with a yellowish fur; a scalding sensation in passing the urine, which is charged with bile; an icteric of the albuginea and skin; the pulse hard, full, and strong; the bowels costive, though in hot climates, acute hepatitis is often attended from the beginning with small, liquid, and slimy discharges from the bowels.

As the disease advances the patient experiences great difficulty in lying on either side, and when

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he does thus lay, he rests best on the side affected.

The tenderness in some cases extends throughout the whole abdomen; this is believed to take place, when the peritoneal coat of the liver is affected, and the disease extends itself along that membrane.

In hot climates, where this disease occurs most frequently, and where of course the predisposing causes are most abundant, its progress is rapid: supuration ensuing in a few days, and in some instances, without previous pain or fever; there being a mixed action of inflammation and congestion.

It is sometimes ushered in under the form of Cholera morbus.

This disease like most others,

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has its anomalies.

Professor Chapman mentions cases where all the premonitory signs were wanting and the disease was disguised under the form of pneumonia & the head only was affected, or the kidneys, or the umbilicus, or the calf of the leg, or there was paralysis of the arms.

Thus, Hepatitis is sometimes shrouded in obscurity, and eminently calculated to deceive the young practitioner.

It was the opinion of Dr. Cullen that when the convex surface <sup>of the liver</sup> was the part diseased, the lungs were likewise affected; when the under surface was affected, the abdominal contents suffered; when the peritoneal investment of the liver is inflamed

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the patient experiences severe lancinating pains, with a corded pulse, and the general aspect but slightly changes; when the inflammation extends to the parenchymatous structure, the pulse is full and round, with a sensation of fulness and weight in the part, the skin and eyes tinged of a yellow or saffron hue.

Both sexes are liable to Hepatitis, though women are supposed to be not so frequently affected with it as men; children are also much exposed to it in miasmatic districts.

The causes are vicissitudes of weather, blows, falls, wounds, intemperance, intense heat, miasma, cold after profuse perspiration, excessive grief, violent rage, affections of the mind,



The too common use of mercury  
is mentioned by Dr. Somerville of  
Virginia, as one of the most frequent  
causes.

In the diagnosis there is gene-  
rally some difficulty.

The diseases with which it is  
most liable to be confounded, are,  
Pneumonia, inflammations, Gastritis,  
Abscess in the parietes of the colon,  
as it passes through the right hypo-  
chondrium, Spasm of the gall ducts  
from Calculi &c.

From the first it may be dis-  
tinguished by the pain, cough, and  
respiration not being similar; in He-  
patitis, the pain is not so severe, and  
extends to the shoulder; the cough is dry,  
and seldom any expectoration of blood,

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the respiration much less difficult, in hepatic inflammation, the easiest position is on the affected side; in Pleuritis, on the sound side, in Hepatitis, pressure on the right hypochondriac region aggravates the pain; there is also a sallow countenance, gastric distress, the urine when emitted produces a scalding sensation and depositing a sediment and the feces being of a clay or ash colour.

From Gastritis it may be known by the extreme prostration in the latter, the immediate rejection of every thing taken into the stomach, the small tense pulse &c.

It may be distinguished from spasm of the gall duct by the absence of fever and the intermitting character

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of the pain in the latter affection.

If the disease resists the usual remedies, or is suffered to run its course, it may terminate either in resolution, suppuration, gangrene, induration or scirrhos.

If it does not end in resolution, it generally terminates in suppuration, and then the degree of danger, depends much upon the situation of the abscess; if it points externally, an opening should be made, and the matter evacuated accordingly.

It sometimes forms adhesions to some part of the alimentary canal and breaks into it, or the matter passes through the biliary ducts, and is thrown out by vomiting, or is carried off by the rectum.

It sometimes bursts into the thorax,

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and the patient dies from suffocation, or the matter is discharged by expectoration, though recoveries are extremely rare when this takes place, and always fatal when the abscess bursts into the cavity of the abdomen.

It is an extremely rare occurrence for it to terminate in gangrene.

When this disease terminates by resolution, there are critical discharges from the nose, hemorrhoidal vessels, or by prostration, or by a spontaneous diarrhoea, or the irritation is transferred to the skin, and appears in the form of Erysipelas.

Examinations after death, prove that the Lunc is variously affected.

It has been found much enlarged, its colour changed, indurated or

The nature of the subject  
is such that it is not possible  
to give a complete account  
of the subject in a few words  
but the following is a brief  
outline of the subject.  
It is a subject of great  
importance in the history  
of the human mind.  
The subject is divided into  
two main parts, the first  
of which is the history of  
the human mind from the  
beginning of time to the  
present day. The second  
part is the history of the  
human mind from the present  
day to the future.

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tuberculated, its peritoneal coat exhibiting marks of inflammation or peritoneal adhesions to the neighbouring parts abscesses, hydatids, and biliary calculi, have all been found upon inspection of those who have died of this disease.

Prognosis, of this it will be sufficient to say, that when timely attacked with appropriate remedies, it is submissive: under other circumstances it is fatal, or leaves behind it a distressing train of symptoms, which sometimes continues to harass the patient the remainder of his life.

Most Pathologists agree that it has its primary seat in the mucous membrane of the stomach: this first becomes irritated, and the irritation





then extends to the liver, as in Cholera Morbus.

Treatment. During the inflammatory stage it will be proper to adopt general bleeding; twenty or thirty oz. of blood should be abstracted at the first operation, and if this should not be sufficient to make a salutary impression on the system, it should be repeated, regulating the quantity taken away by the severity of pain and the degree of fever present. By neglecting to bleed sufficiently in this disease, suppuration is likely to ensue. Cups and leeches to the hypochondrium, are important auxiliaries, and should never be omitted.

Purgatives are very serviceable in the early stages of Hepatitis.



We may begin with jalap, combined with Calomel, in sufficient quantity to evacuate the bowels thoroughly; after this, Calomel given in large doses at night, and worked off in the morning by means of Epsom Salt or castor oil.

Calomel is sometimes given in small doses, until 15 or 20 grs. are taken, and then purged ~~per~~ off in the manner mentioned above. Counter irritants, by means of blisters, are very beneficial. Leeches applied to the anus have been useful in diminishing the quantity of blood sent to the liver through the *Vena Portarum*. The secretory function of the liver being impaired, healthy action cannot be induced until this is restored; which may be most generally accomplished, by a rigid —

enforcement of the police and  
local

Enforcement of the plan of treatment  
 already laid down, aided by fomenta-  
 tions to the region of the Liver, antima-  
 al diaphoretics, acidulated drinks,  
 and a strict abstinence to the anti-  
 phlogistic regimen. After this plan  
 has been rigidly observed for six or  
 seven days and the disease does  
 not yield, mercury should be em-  
 ployed with a view to produce  
 ptyalism; in order to effect this -  
 calomel should be administered in  
 half gr. doses, two or three times a day.  
 to obviate its purgative effects, it may  
 be combined with a small quantity  
 of <sup>Opium</sup> and its operation may be much af-  
 -sisted by the external application  
 of Mercurial ointment, which may  
 be applied to the region of the Liver.

*[Faint, illegible handwriting, likely bleed-through from the reverse side of the page.]*

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Salivation, in order to be effectual,  
should be gradually induced and  
kept up for some time. Dr Johnson  
speaks very highly of the nitro-muri-  
atic acid bath, or sponging the whole  
surface of the body with it, as a mode  
of producing salivation, or as an ad-  
juvant to Mucung - the following is  
the formula. Nitric and muriatic,  
<sup>acid</sup>  
aa one part, water two part. of this  
mixture take ℥j. to boiling water  
four quarts.

To obviate the too severe effects  
of Mucung, a solution of any of the neu-  
tral salts, or an infusion of Senna may  
be given, every three or four days;  
Suppuration sometimes takes place  
in spite of all our efforts; when this  
is the case, and the abscess points

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externally, it must be opened, and the matter evacuated, after which the patient will be in a debilitated state, and will require tonics, with a mild and nutritious diet; the nitro-muriatic acid forms a most excellent tonic, and should not be neglected, especially where the secretory power is but imperfectly restored, and the longer continuance of Mercury would not be advisable.

